

Application Type Renewal  
Facility Type Municipal  
Major / Minor Major

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0026468  
APS ID 1066511  
Authorization ID 1401476

**Applicant and Facility Information**

Applicant Name	<u>Lower Bucks County Joint Municipal Authority</u>	Facility Name	<u>Lower Bucks WWTP</u>
Applicant Address	<u>7811 New Falls Road</u> <u>Levittown, PA 19055-1014</u>	Facility Address	<u>7900 Bristol Pike</u> <u>Levittown, PA 19057-5106</u>
Applicant Contact	<u>Vijay Rajput</u>	Facility Contact	<u>Michael Andrews</u>
Applicant Phone	<u>(215) 945-7400</u>	Facility Phone	<u>(215) 946-0731</u>
Client ID	<u>64797</u>	Site ID	<u>263073</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Bristol Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Bucks</u>
Date Application Received	<u>June 23, 2022</u>	EPA Waived?	<u>No</u>
Date Application Accepted	<u></u>	If No, Reason	<u>Major POTW, PCBs TMDL</u>
Purpose of Application	<u>Permit Renewal.</u>		

**Summary of Review**

The applicant requests renewal of an NPDES permit to discharge 10 MGD of treated sewage into Delaware River Estuary Zone 2 from the Lower Bucks County Joint Municipal Authority's (LBCJMA) sewage treatment plant serving Bristol Township, Falls Township, Middletown Township, and Tullytown Borough.

The sewage treatment plant is conventional activated Sludge Plant. The treatment plant includes two (2) automatic center flow fine screens with two (2) washing compactors, grit removal system (two units), flow equalization system which consists of two (2) tanks with aeration system, primary sedimentation tanks (five tanks), aeration tanks (four tanks), final sedimentation tanks (five tanks), chlorine contact tanks (6 contact tanks), dissolved air flotation system, anaerobic sludge digestors, and sludge dewatering system involving sludge dewatering centrifuge. The authority is going to replace existing chlorine disinfection system with Ultraviolet (UV) disinfection system which will involve modification to the existing chlorine contact tanks and unused portion of contact tanks as emergency back-up. Waste activated sludge and primary sludge are thickened using dissolved air flotation. The thickened sludge is fed to three (3) each single stage completely mixed anaerobic digestors. Digested sludge from the three single stage completely mixed anaerobic digestors is transferred to one secondary anaerobic digester from where sludge is withdrawn for dewatering. Digested sludge is dewatered using a sludge dewatering centrifuge. Dewatered sludge is transported and disposed of at Waste Management's Landfills. The plant is equipped with emergency generator.

**Conventional Parameters:** For this permit renewal, we have included monitoring requirements for E. Coli which is consistent with our SOP. Effluent limit for Ammonia is revised to 20 mg/l in this permit renewal to maintain the current treatment quality while DRBC is working on an Ammonia criterion for Estuary. Monitoring requirements for UV Disinfection is included in this permit renewal. This permit renewal removes mass limit and % removal requirement of CBOD20 and replaces it with effluent limit and % removal requirement for CBOD5 as suggested by DRBC. The LBCJMA was granted a CBOD20 mass limit of 2,410 lbs, and the zone 2 percent removal requirement is 88.5. Compliance with the CBOD20

Approve	Deny	Signatures	Date
X		<i>Ketan Thaker</i> Ketan Thaker / Project Manager	12/29/2022
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	12/29/2022

**Summary of Review**

allocation can be demonstrated by meeting CBOD5 effluent load limit of 1607 lbs/day. Compliance with the 88.5% Zone 2 reduction requirement can be demonstrated by meeting the 88.5% CBOD5 requirement in the permit.

The discharge is generally in compliance with the existing permit limits. Effluent limits for CBOD5, D.O., TSS, TRC, and TDS, will remain the same for this permit renewal. Quarterly effluent limit of 1000 mg/l requirement for Total Dissolved Solids (TDS) will continue in this permit renewal as recommended by Delaware River Basin Commission (DRBC) under their Docket No. D-1993-068-CP-3 dated December 13, 2017. Effluent monitoring requirements for Total Phosphorus and Total Nitrogen along with Influent monitoring requirements for Total Suspended Solids (TSS) and BOD5 will continue in this permit renewal and are in consistent with Standard Operating Procedure (SOP) for establishing effluent limits for individual sewage permits.

**Toxic Parameters:** The STP discharges the treated wastewater into Delaware River Estuary Zone 2. The Instream Flow Q7-10 is 2673 cfs. The permitted discharge flow is 10 mgd for this facility. The acute Dilution factor is 2.7 and Chronic Dilution Factor is 158. The AFC WQC for Copper is 13.55 µg/L and CFC WQC for Copper is 8.9 µg/L. The maximum reported concentration is 16 µg/L. The WQBEL for Acute would be 13.44 X 2.7 = 36.28 µg/L and WQBEL for Chronic would be 8.96 X 158 = 1422 µg/L. Therefore, monitoring is added for Total Copper in the permit as maximum reported concentration is between 10% - 50% of the WQBEL.

**Pretreatment Program:** Permittee is required to Operate and Implement EPA approved Pretreatment Program as there are four Industrial Facilities contributing their waste into the sewage treatment plant. The four industrial users are: (1) Torrent Pharma, Inc., (2) Master Builders, (3) Consolidated, (4) Performance Coatings Corporation.

**Biomonitoring:** As per DRBC toxic wasteload allocation program, monitoring requirements for Toxicity (Acute and Chronic) were included in the last permit renewal. All of the WET Test results show no toxicity. Using a water quality model, the DRBC calculated a Waste load allocation (WLA) of 4 TUc for this facility. Based on our SOP, this permit renewal includes monitoring requirements for Chronic Test with Dilution Series 1, 2, 30, 60, 100 % Effluent. Permittee will conduct separate Acute Test and submit results directly to DRBC.

**Stormwater Outfalls:** There are two stormwater Outfalls (002 and 003) in the permit that discharge stormwater from the treatment plant area.

**PCB Minimization Plan:** On December 15, 2003, the U.S. EPA Regions 2 and 3 adopted a Total Maximum Daily Load (TMDL) for PCBs for Zones 2, 3, 4, and 5 of the tidal Delaware River. The TMDL requires that facilities identified as discharging PCBs to the Delaware River prepare and implement a PCB Waste Minimization and Reduction Program also known as Pollution Minimization Plan (PMP). This facility has been identified as Group discharger. WLA for Total PCBs for Lower Bucks WWTP is 451.42 ug/day. The facility contributes to the 99 % of the cumulative load and is therefore required to collect 2 dry weather samples annually at outfall 001. The facility had submitted revised PMP plan on April 7, 2015 to DEP/DRBC. It was reviewed and approved on September 15, 2015. The facility has been consistently submitting PCB data for outfall 001.

Following are the effluent limits:

PARAMETER	EFFLUENT LIMIT (AV. MO IN MG/L)	BASIS
CBOD <sub>5</sub>	20	25 Pa Code 92a.47
Total Suspended Solids	30	25 Pa Code 92a.47
Ammonia-Nitrogen	20	BPJ
Dissolved Oxygen	2.0 (minimum)	BPJ
Total Residual Chlorine	0.5	25 Pa Code 92a.47-48
pH (SU)	6.0 to 9.0 SU	25 Pa Code 92a.47, 95.2
Fecal Coliform (#/100 ml)	200 #/100 ml (Geo Mean)	25 Pa Code 92a.47
UV light intensity (mw/ cm <sup>2</sup> )	Report	25 Pa Code 92a.47-48
Total Phosphorus	Report	25 Pa Code 92a.61
Total Nitrogen	Report	25 Pa Code 92a.61
Total Dissolved solids	1000	DRBC Docket D-1993-068 CP-3
PCBs (Dry Weather) pg/L	Report	DRBC Docket D-1993-068 CP-3
Chronic Toxicity (TUc)	Report	DRBC Docket D-1993-068 CP-3
E. Coli	Report	25 Pa Code 92a.47

**Summary of Review**

Copper, Total	Report	Max. reported Concentration Between 10% to 50 % WQBEL
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Act-14 Notification to Bristol Township on June 2, 2022

Act-14 Notification to Bucks County Commissioner's Office on June 2, 2022

Sludge use and disposal description and location(s): dewatered sludge is transported and disposed of at Waste Management's Landfill.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

**Discharge, Receiving Waters and Water Supply Information**

Outfall No.	<u>001</u>	Design Flow (MGD)	<u>10</u>
Latitude	<u>40° 7' 34.06"</u>	Longitude	<u>-74° 49' 29.59"</u>
Quad Name	_____	Quad Code	_____
Wastewater Description: <u>Effluent</u>			

Receiving Waters	<u>Delaware River (WWF, MF)</u>	Stream Code	<u>00002</u>
NHD Com ID	<u>25486830</u>	RMI	<u>122</u>
Drainage Area	<u>7100 sq. miles</u>	Yield (cfs/mi <sup>2</sup> )	_____
Q <sub>7-10</sub> Flow (cfs)	<u>2637 cfs</u>	Q <sub>7-10</sub> Basis	_____
Elevation (ft)	_____	Slope (ft/ft)	_____
Watershed No.	<u>2-E</u>	Chapter 93 Class.	<u>WWF, MF</u>
Existing Use	_____	Existing Use Qualifier	_____
Exceptions to Use	_____	Exceptions to Criteria	_____

Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>POLYCHLORINATED BIPHENYLS (PCBS)</u>		
Source(s) of Impairment	<u>SOURCE UNKNOWN</u>		
TMDL Status	<u>Final</u>	Name	<u>Delaware River Estuary PCB TMDLs</u>

Background/Ambient Data	Data Source	
pH (SU)	_____	_____
Temperature (°F)	_____	_____
Hardness (mg/L)	_____	_____
Other:	_____	_____

Nearest Downstream Public Water Supply Intake		_____
PWS Waters	_____	Flow at Intake (cfs) _____
PWS RMI	_____	Distance from Outfall (mi) _____

**Discharge, Receiving Waters and Water Supply Information**

Outfall No.	<u>002</u>	Design Flow (MGD)	<u>0</u>
Latitude	<u>40° 7' 35.03"</u>	Longitude	<u>-74° 49' 28.08"</u>
Quad Name	_____	Quad Code	_____
Wastewater Description: <u>Stormwater</u>			

Receiving Waters	<u>Delaware River (WWF, MF)</u>	Stream Code	<u>00002</u>
NHD Com ID	<u>25486830</u>	RMI	_____
Drainage Area	_____	Yield (cfs/mi <sup>2</sup> )	_____
Q <sub>7-10</sub> Flow (cfs)	_____	Q <sub>7-10</sub> Basis	_____
Elevation (ft)	_____	Slope (ft/ft)	_____
Watershed No.	<u>2-E</u>	Chapter 93 Class.	<u>WWF, MF</u>
Existing Use	_____	Existing Use Qualifier	_____
Exceptions to Use	_____	Exceptions to Criteria	_____

Assessment Status	<u>Impaired</u>
Cause(s) of Impairment	<u>POLYCHLORINATED BIPHENYLS (PCBS)</u>
Source(s) of Impairment	<u>SOURCE UNKNOWN</u>
TMDL Status	<u>Final</u> Name <u>Delaware River Estuary PCB TMDLs</u>

Background/Ambient Data	Data Source
pH (SU)	_____
Temperature (°F)	_____
Hardness (mg/L)	_____
Other:	_____

Nearest Downstream Public Water Supply Intake	
PWS Waters	Flow at Intake (cfs)
PWS RMI	Distance from Outfall (mi)

**Discharge, Receiving Waters and Water Supply Information**

Outfall No.	<u>003</u>	Design Flow (MGD)	<u>0</u>
Latitude	<u>40° 7' 35.58"</u>	Longitude	<u>-74° 49' 26.56"</u>
Quad Name	_____	Quad Code	_____
Wastewater Description: <u>Stormwater</u>			

Receiving Waters	<u>Delaware River (WWF, MF)</u>	Stream Code	<u>00002</u>
NHD Com ID	<u>25486830</u>	RMI	_____
Drainage Area	_____	Yield (cfs/mi <sup>2</sup> )	_____
Q <sub>7-10</sub> Flow (cfs)	_____	Q <sub>7-10</sub> Basis	_____
Elevation (ft)	_____	Slope (ft/ft)	_____
Watershed No.	<u>2-E</u>	Chapter 93 Class.	<u>WWF, MF</u>
Existing Use	_____	Existing Use Qualifier	_____
Exceptions to Use	_____	Exceptions to Criteria	_____

Assessment Status	<u>Impaired</u>
Cause(s) of Impairment	<u>POLYCHLORINATED BIPHENYLS (PCBS)</u>
Source(s) of Impairment	<u>SOURCE UNKNOWN</u>
TMDL Status	<u>Final</u>
Name	<u>Delaware River Estuary PCB TMDLs</u>

Background/Ambient Data	Data Source
pH (SU)	_____
Temperature (°F)	_____
Hardness (mg/L)	_____
Other:	_____

Nearest Downstream Public Water Supply Intake	
PWS Waters	_____
PWS RMI	_____
Flow at Intake (cfs)	_____
Distance from Outfall (mi)	_____

Treatment Facility Summary				
Treatment Facility Name: Lower Bucks WWTP				
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Activated Sludge	Ultraviolet	10
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
10	32000	Not Overloaded	Centrifugation	Combination of methods

Compliance History

DMR Data for Outfall 001 (from August 1, 2021 to July 31, 2022)

Parameter	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21
Flow (MGD) Average Monthly	5.46	6.73	7.65	8.25	6.81	7.35	6.34	5.69	6.5	6.8	8.62	8.55
Flow (MGD) Daily Maximum	6.5	8.3	12.1	14	7.9	10.7	7.6	6.5	8.0	10.3	13.7	13.2
pH (S.U.) Instantaneous Minimum	6.8	6.6	6.5	6.5	6.6	6.8	6.8	6.8	6.8	6.8	6.5	6.7
pH (S.U.) Instantaneous Maximum	7.2	7.1	7.0	7.1	7.1	7.2	7.8	7.3	7.3	7.2	7.2	7.2
DO (mg/L) Instantaneous Minimum	3.4	3.3	3.2	2.0	3.7	3.2	2.6	3.7	2.9	3.1	2.6	2.3
TRC (mg/L) Average Monthly	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
TRC (mg/L) Instantaneous Maximum	0.7	0.7	0.6	0.7	0.6	0.7	0.6	0.7	0.7	0.7	0.6	0.6
CBOD5 (lbs/day) Average Monthly	325	405	383	420	358	419	456	415	687	364	482	559
CBOD5 (lbs/day) Weekly Average	338	482	450	619	409	542	601	475	732	470	713	725
CBOD5 (mg/L) Average Monthly	7.2	7.18	5.9	5.9	6.3	6.75	8.6	8.8	12.7	6.3	6.6	7.7
CBOD5 (mg/L) Weekly Average	7.6	7.8	7.3	7.1	12.0	7.9	10.3	10.0	14.3	7.4	7.8	9.8
BOD5 (lbs/day) Raw Sewage Influent   Average Monthly	10434	13887	13994	16769	14505	17543	17136	12928	18451	16384	15395	15081
BOD5 (mg/L) Raw Sewage Influent   Average Monthly	229	249	220.87	250	255	292	325	273	340	289	225	213.7
CBOD20 (lbs/day) Average Monthly	1799	1737	2216	2823	1840	2085	1851	2712	2454	1530	1844	1920



**NPDES Permit Fact Sheet  
Lower Bucks WWTP**

**NPDES Permit No. PA0026468**

CBOD20 (%) Percent Removal   Minimum Monthly Average	90.0	92.0	92.0	90.0	92.0	92.0	92.0	87.2	89.0	93.0	92.0	91.0
TSS (lbs/day) Average Monthly	593	673	464	1475	499	446	670	600	1606	730	1057	1126
TSS (lbs/day) Raw Sewage Influent   Average Monthly	9476	946	16043	14047	17228	15969	15837	12655	12930	13475	13681	13750
TSS (lbs/day) Weekly Average	901	1209	731	3581	668	671	923	733	1884	885	2122	2165
TSS (mg/L) Average Monthly	13.6	11.6	6.97	16.5	8.8	7.2	12.6	12.7	29.9	12.8	13.8	13.5
TSS (mg/L) Raw Sewage Influent   Average Monthly	207	16.8	258	211	303	266	302	267	237.8	238	194	195
TSS (mg/L) Weekly Average	20.6	19.0	12.0	34.1	12.0	9.9	16.0	15.4	35.1	17.4	22.6	25.3
Total Dissolved Solids (mg/L) Average Quarterly		338.0			274.0			298.0			340.0	
Total Dissolved Solids (mg/L) Daily Maximum		338			274.0			298.0			340.0	
Fecal Coliform (No./100 ml) Geometric Mean	47.8	32.8	42.9	53	48	57	141	138	144	143.4	57	101
Fecal Coliform (No./100 ml) Instantaneous Maximum	900	656	449	900	205	410	880	469	900	550	313	900
Total Nitrogen (lbs/day) Average Monthly	934	1443	1652	1389	1615	1141	1981	1913	1699	1068	242	1593
Total Nitrogen (mg/L) Average Monthly	19.65	27	29.56	26.03	32.3	18	40	40	26.5	18.8	3.63	26.9
Ammonia (lbs/day) Average Monthly	934	1073	1232	1383	1364	1564	1567	1523	1353	1046	903	1226
Ammonia (mg/L) Average Monthly	20.5	19.1	19.5	20.5	23.99	25.4	29.9	32.1	25.2	18.5	13.0	17.6

**NPDES Permit Fact Sheet  
Lower Bucks WWTP**

**NPDES Permit No. PA0026468**

Total Phosphorus (lbs/day) Average Monthly	136	181	177	128	124	115	124	120	139	44.2	117	171
Total Phosphorus (mg/L) Average Monthly	2.87	3	3.17	2.39	2.5	1.84	2.5	2.5	2.17	0.78	1.76	2.89
PCBs (Dry Weather) (pg/L) Daily Maximum		685						1180				
Acute WET - Ceriodaphnia Survival (TUa) Daily Maximum		1						1				
Chronic WET - Ceriodaphnia Survival (TUc) Daily Maximum		1.7						100				
Chronic WET - Ceriodaphnia Reproduction (TUc) Daily Maximum		3.3						100				
Acute WET - Pimephales Survival (TUa) Daily Maximum		1.2						1				
Chronic WET - Pimephales Survival (TUc) Daily Maximum		1.7						100				
Chronic WET - Pimephales Growth (TUc) Daily Maximum		3.3						100				

**DMR Data for Outfall 002 (from August 1, 2021 to July 31, 2022)**

Parameter	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21
pH (S.U.) Daily Maximum								7.5				
CBOD5 (mg/L) Daily Maximum								12.12				

**NPDES Permit Fact Sheet  
Lower Bucks WWTP**

**NPDES Permit No. PA0026468**

COD (mg/L) Daily Maximum									< 25			
TSS (mg/L) Daily Maximum									1.2			
Oil and Grease (mg/L) Daily Maximum									< 5			
TKN (mg/L) Daily Maximum									1.63			
Total Phosphorus (mg/L) Daily Maximum									0.02			
Dissolved Iron (mg/L) Daily Maximum									< 0.02			

**DMR Data for Outfall 003 (from August 1, 2021 to July 31, 2022)**

<b>Parameter</b>	<b>JUL-22</b>	<b>JUN-22</b>	<b>MAY-22</b>	<b>APR-22</b>	<b>MAR-22</b>	<b>FEB-22</b>	<b>JAN-22</b>	<b>DEC-21</b>	<b>NOV-21</b>	<b>OCT-21</b>	<b>SEP-21</b>	<b>AUG-21</b>
pH (S.U.) Daily Maximum								7.58				
CBOD5 (mg/L) Daily Maximum								11.93				
COD (mg/L) Daily Maximum								38				
TSS (mg/L) Daily Maximum								2.6				
Oil and Grease (mg/L) Daily Maximum								< 5				
TKN (mg/L) Daily Maximum								0.74				
Total Phosphorus (mg/L) Daily Maximum								0.09				
Dissolved Iron (mg/L) Daily Maximum								0.16				

**WET Summary and Evaluation**

Facility Name	Lower Bucks WWTP
Permit No.	PA0026468
Design Flow (MGD)	10
Q <sub>7-10</sub> Flow (cfs)	2637
PMF <sub>a</sub>	0.01
PMF <sub>c</sub>	0.921

Species	Endpoint	Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Pimephales	Survival	10/5/21	3/9/21	4/28/20	8/11/20
		PASS	PASS	PASS	PASS

Species	Endpoint	Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Pimephales	Growth	10/5/21	3/9/21	8/11/20	4/28/20
		PASS	PASS	PASS	PASS

Species	Endpoint	Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Ceriodaphnia	Survival	10/4/21	3/9/21	8/10/20	4/28/20
		PASS	PASS	PASS	PASS

Species	Endpoint	Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Ceriodaphnia	Reproduction	10/4/21	3/9/21	8/10/20	4/28/20
		PASS	PASS	PASS	PASS

Reasonable Potential? NO

**Permit Recommendations**

Test Type           Chronic  
 TIWC                1       % Effluent  
 Dilution Series    1, 2, 30, 60, 100 % Effluent  
 Permit Limit       None  
 Permit Limit Species

**Proposed Effluent Limitations and Monitoring Requirements**

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

**Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.**

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Recorded
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	2.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.2	1/day	Grab
CBOD5	1607	2410	XXX	20.0	30.0 Wkly Avg	40	1/day	24-Hr Composite
CBOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/day	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/day	24-Hr Composite
CBOD5 % Removal (%) Percent Removal	XXX	XXX	XXX	88.50 Min Mo Avg	XXX	XXX	1/week	Calculation
TSS	2500	3700	XXX	30.0	45.0 Wkly Avg	60	1/day	24-Hr Composite
TSS Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/day	24-Hr Composite
Total Dissolved Solids	XXX	XXX	XXX	1000.0 Avg Qrtly	2000.0	2500	1/quarter	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/day	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/day	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/month	Grab

Outfall001 , Continued (from Permit Effective Date through Permit Expiration Date )

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
UV Intensity (mW/cm <sup>2</sup> )	XXX	XXX	Report	XXX	XXX	XXX	1/day	Grab
Total Nitrogen	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Ammonia	1668	XXX	XXX	20.0	XXX	40	1/day	24-Hr Composite
Total Phosphorus	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Copper, Total	Report	Report	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
PCBs (Dry Weather) (pg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
Chronic WET - Ceriodaphnia Survival (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit	24-Hr Composite
Chronic WET - Ceriodaphnia Reproduction (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit	24-Hr Composite
Chronic WET - Pimephales Survival (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit	24-Hr Composite
Chronic WET - Pimephales Growth (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit	24-Hr Composite

**Proposed Effluent Limitations and Monitoring Requirements**

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (362-0400-001), SOPs and/or BPJ.

**Outfall 002, Effective Period: Permit Effective Date through Permit Expiration Date.**

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
CBOD5	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
TKN	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab

**Proposed Effluent Limitations and Monitoring Requirements**

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (362-0400-001), SOPs and/or BPJ.

**Outfall 003, Effective Period: Permit Effective Date through Permit Expiration Date.**

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
CBOD5	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
TKN	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab